



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/501,169

07/12/2004

Siebe Tjerk De Zwart

NL020016

5392

24737

7590

03/20/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

DONG, DALEI

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/501,169

Applicant(s)

DE ZWART ET AL.

Examiner

Dalei Dong

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11-13, 15-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 14 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see page 6, filed March 3, 2006, with respect to claims 1-10 have been fully considered and are persuasive. The Final Rejection of January 18, 2006 has been withdrawn. However, the Applicant's argument with respect to claims 11-20 have been fully considered but they are not persuasive.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 11-13, 15-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,677,709 to Ma.

Regarding to claim 11, Ma discloses in Figures 1-3 and 9, a display device comprising: a plurality of first electrodes (120), a plurality of second electrodes (170), a plurality of light-emitting elements (130) that are operably coupled to the plurality of first electrodes (120), a foil (180) that includes an electrically conductive layer (190) that is configured to provide selective contact to select elements of the plurality of light emitting elements (130), wherein the selective contract is determined based on a potential

difference between the foil (180) and select electrodes of the plurality of second electrodes (170) (see column 5, lines 29-42, wherein the OLED is switched on and off by applying an activating voltage to the second electrodes 170 while supplying a control voltage to the conductive layer 190 of the foil 180).

Regarding to claim 12, Ma discloses in Figures 1-3 and 9, the light emitting element (130) include organic electroluminescent devices.

Regarding to claim 13, Ma discloses in Figures 1-3 and 9, the light emitting elements includes light emitting diodes.

Regarding to claim 14, Ma discloses in Figures 1-3 and 9, the foil (180) is configured to be in contact with the light-emitting elements (130) in the absence of a potential difference between the conductive layer (190) of the foil and the plurality of first electrodes (120).

Regarding to claim 15, Ma discloses in Figures 1-3 and 9, the second electrodes (170) correspond to row select electrodes, and the first electrodes (120) correspond to data electrodes.

Regarding to claim 16, it is old and well known in the art to utilize a pulse-width modulated signal to drive data electrodes. Furthermore, applying pulse-width modulated

signal to the display device pertains to the method of operating the display device and does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations (see MPEP 2114).

Regarding to claim 17, Ma discloses in Figures 1-3 and 9, the conductive layer (190) of the foil (180) is maintained at a substantially constant potential (control voltage).

Regarding to claim 18, Ma discloses in Figures 1-3 and 9, the plurality of first electrodes (120) are arranged substantially orthogonal to the plurality of second electrodes (170).

Regarding to claim 20, Ma discloses in Figures 1-3 and 9, the foil includes an evaporable polymer (see column 4, lines 60-65).

***Allowable Subject Matter***

4. Claims 1-10 are allowed.
5. The following is an examiner's statement of reasons for allowance:

Regarding to independent claim 1, prior art of record taken alone or in combination fails to teach or suggest a display device comprising: an electromechanically operable foil having at least one electrically conducting side that is substantially unpatterned in combination with other claimed features of the present claimed invention.

Regarding to claims 2-10, are allowable because of the dependency upon the allowable independent claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Claims 14 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding to claim 14, prior art of record taken alone or in combination fails to teach or suggest the foil is configured to be in contact with the light-emitting elements in the absence of a potential difference between the conductive layer of the foil and the plurality of first electrodes.

Regarding to claim 19, prior art of record taken alone or in combination fails to teach or suggest the foil is substantially unpatterned.

***Response to Arguments***

7. Applicant's arguments filed November 16, 2005 have been fully considered but they are not persuasive.

In response to Applicant's argument that the Ma reference fails to teach or suggest that the select contact is determined based on the potential difference between the foil and select electrodes of the plurality of second electrodes, the Examiner respectfully disagree. The Examiner asserts that the Ma reference clearly teaches the OLED is switched on and off by applying an activating voltage to the second electrodes 170 while supplying a control voltage to the conductive layer 190 of the foil 180 (see column 5, lines 35-43). The Examiner asserts that the limitation of select contact is determined based on the potential difference between the foil and select electrodes of the plurality of the second electrodes is merely a function or method of operating the display device and it fails to differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (see MPEP 2114). Thus, the Examiner asserts that the prior art of record teaches the claimed display device and maintains the rejection.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following prior art are cited to further show the state of the art of composition of a display device.

U.S. Patent No. 6,528,937 to Van Gorkom.

Art Unit: 2879

U.S. Patent No. 6,908,217 to Van Gorkom.

U.S. Patent No. 6,956,332 to Van Gorkom.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (571)272-2370. The examiner can normally be reached on 8 A.M. to 5 P.M..

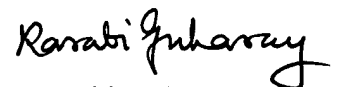
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571)272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D.D.

March 10, 2006



Karabi Guharay  
Primary Examiner  
Art Unit 2879